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ANNUAL ADDRESS

AND REPORT

— TO THE —

MECHANICS' INSTITUTE,

— BY —

A. S. HALLIDIE, PRESIDENT.

Delivered at their Rooms, June 6th, 1874.

SAN FRANCISCO:
CHAS. W. GORDON, BOOK AND JOB PRINTER,
326 Sansome Street, corner of Sacramento

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ADDRESS.

To the members of the Mechanics' Institute:

GENTLEMEN:

The fiscal year having now ended, I respectfully submit the address and report usual at this date.

No unusual event has occurred to interrupt the progress of the Mechanics' Institute, and while your society has been moving steadily forward, its progress has been retarded by want of funds, which has prevented any steps being taken in the direction of material enlargement of the Library of Reference, or in the establishment of a practical school of industrial education.

The Library of Reference contains valuable works on the arts and sciences, but as no important purchases have been made for about three years, the recent publications of scientific works have not found their way into that library.

While it is absolutely necessary to keep up the supply of popular works of fiction in order to furnish the general reader with books suited to his taste, it must be borne in mind that the real value of your library consists in its richness in works of acknowledged value in the arts and sciences.

The transactions of scientific bodies at home and abroad contain valuable papers bearing on these subjects. Many of these transactions are in the library, and efforts should be made to secure those not already obtained.

The Library of Reference promises to become of incalculable value, not only to the members of the Institute, but to the Pacific coast, and it has been the wish of the Trustees to place it on so sure a basis, that its value will not only be acknowledged, but appreciated.

The books in this room are not permitted to be withdrawn, so that the dangers of damage to the books or absolute loss is prevented, as well as the inconvenience of absence—it is in fact a safe depository.

It is to be hoped that our citizens will bear this in mind when they feel in a liberal mood, for I can assure them that there can be no gift so acceptable to the mechanic and scientist, or any searcher after truth, than a collection of valuable scientific works, and there is no place more convenient for the general public, and where such a gift can be so well guarded, and do so much good as the Reference Library of the Mechanics' Institute.

It is the intention of the Trustees to have a complete catalogue made of the works in that room.

The general library is becoming crowded, and the need of more space will soon compel your Trustees to exercise some ingenuity in providing room, without inconvenience to the members, or without much cash outlay.

The usual course of winter lectures, under the auspices of your society, by the professors in the University, has been completed. The attendance was not as good as usual, and the receipts were not quite sufficient to pay expenses.

This may be accounted for from the number of similar lectures occuring in the same period, or from the fee for the course of fifteen lectures being placed at two dollars, which however does not seem to be very large. It is difficult to assign any precise cause, and while we know that there is a requirement in the direction of popularizing industrial education, this requirement is so illy defined—so vague and general, that it is difficult to put in precise form and really practical shape.

Those who, having given this matter the most thought, see the vastness of the subject—the unlimited field of experiment, and fear that a failure in a first attempt would be a disaster from which it would be difficult to recover.

How far the Mechanics' Institute, the public schools, or the State University can take hold of this subject, must be a matter of careful consideration for the best minds and clearest heads of these times.

Let us teach our boys trades; in this I heartily concur—also let them be disciplined in habits of industry, economy and good morals.

The University, the public schools, or the Mechanics' Institute, however much they may tend toward this end, are not the places to teach trades—the shops are the places for that. The former can prepare them for the practical affairs of life, but the practice must be in the busy world—the manufactory, the shop or the counting house. These are already to hand, prepared and in working order, and there is no necessity for duplicating them.

If it should be made the province or duty of the public schools or the State University to teach trades, the question then arises—what trades should be taught? I have asked this question of quite a number, and naturally the answers vary in accordance with the predilections or partialities of the individual.

It is very possible that the regents of the University, or the directors of the public schools might, in their judgment, give more weight to one branch of trade than to another—all trades would have equal rights, yet all could not be taught—and where should we stop? Try and carry the suggestion to its legitimate conclusion, and the conclusion flies before you like an ever retreating shadow. When an exigency arises, or public policy demands the nurturing of a specified branch of industry, and the power to manage exists in the government, then a school of trade may be established, and supported at public expense, but under our form of government, the man-milliner, or boot and shoemaker, has the same right to consideration as the machinist or builder—hence the branches of industry, the trades to be taught are so numerous, and the field to be covered so extensive, that the public funds would be unable to pay a fraction of the expense, and if attached to the public school system, it must inevitably imperil the very existence of the school system itself. Suppose such trade schools were established, the necessary machinery of sufficient capacity to meet the demands of the youths was purchased and placed in running order, in suitable buildings, the aim of each shop would be to make itself as far as possible self-sustaining, and thus it would come immediately in competition with shops and manufactories already established. You can conceive the result. It is a social weakness that prevents boys of this generation in this city learning trades, and we must look elsewhere than to legislation to correct it. Family and friendly influences, and paternal estimates of

the capacity of their children, do not conduce to the proper training of young men, and until these influences direct themselves to a full appreciation of the importance of this subject, small progress will be made.

I do not wish it to be understood that I believe the state institutions of learning perform their functions in the manner best adapted to bring about the result desired by ourselves. In almost all ages there is a leaning towards polite literature and the classics, which is all proper enough, if it does not crowd out the practical, industrial or technical. If Mrs. Shoddy tries to make a brilliant lawyer, or profound mathematician out of her boy, the process may be similar to propagating hyacinths from cauliflowers—the experiment being at the expense of the cauliflower, yet no one can deny the right of Mrs. Shoddy to make the experiment, except perhaps on the score of humanity.

It is a good sign that this subject of trade tuition is obtaining attention from the public, but it does not make this learning of trades any the more respectable or inviting, by claiming that it is a cure for hoodlumism; a hoodlum is a rank outgrowth from an indifferent, rotten, parental stem, and it is very probable under precisely the same conditions and circumstances I or you would be just as bad, and I do not think the indiscriminate application of this term to those boys who are not "tied to their mothers' apron strings," is judicious or right. The boys of this city are not half as bad as their reputation, or as bad as those who have made this reputation for them.

The shops of San Francisco are as a rule ready and willing to take apprentices—boys who have been trained in average good principles, and give them every advantage. The apprenticeship laws in force in California are similar to those in the eastern states, and were enacted with a view to protect and encourage both apprentice and employer. This fact does not seem to be generally known or recognized, but by reference to the new Civil Code, §§ 264 to 276, it will be fully understood.

Now with shops in existence where trades can be taught, and willingness on the part of the proprietors of these shops to take apprentices, there must be something wrong that no public trade school can make right; and the causes I believe to be first, unwillingness of parents and guardians to make tradesmen or mechanics of their boys; second, the discredit into which

trade tuition has been thrown by inconsiderately proclaiming it the antidote to hoodlumism; third, the misguidance of noisy mechanical politicians; fourth, the general mode of training in the public schools; fifth, the indifference of public sentiment, and sixth, the absence of any tangible evidence, such as a certificate that an apprentice has served his time, and been satisfactorily examined as a qualified mechanic.

And in reference to this latter, this difficulty might be surmounted if the state Board of Regents were instructed to appoint annually a competent committee, to examine the qualifications of different claimants for a certificate of competency in any branch of trade to which the applicant may have faithfully served an apprenticeship.

The true solution of this problem would be the establishment of a mechanics' school by private beneficence, where such rules can be adopted as are best suited to the case, and where the constant care would be to teach such trades as the deliberate judgment of the managers might deem best adapted to the wants of the youth of San Francisco.

In this direction a private endowment would succeed, when a state institution would fail, for the reasons already set forth.

Towards this end a number of gentlemen last winter signified a desire to contribute, and a sum equal to $15,000 a year, for two years, was guaranteed to try the experiment.

Since writing the foregoing, the facts have become public in relation to the bequest of Mr. James Lick of this city—bequests so magnificent, amounting to over $2,000,000, and so admirably bestowed that it would seem as if he had lived under the guidance of California's good angel, and had made his donations by inspiration. The act must send a thrill of pleasure through the soul of every good citizen, and call up an earnest prayer in behalf of the donor.

Mr. Lick, as you know, was a millwright,—a most skillful one—witness his mill in Santa Clara county. Not alone did he excel in this branch of mechanics, but in exquisite inlaid work he was a master. The contributions solicited from him for our fairs attest this, as well as the beautiful clock frame he presented to this society, his own handiwork.

He believes in the mechanic arts, and is proud to day of his connection with them.

You have been under many obligations to him. The first and second fairs ever held by you, were held on ground owned by Mr. Lick, the free use of which he gave to you, and now he has not forgotten you. He provides $10,000 for your library, for the purchase of mechanical and scientific works, and then in recognition of the value of the mechanic arts, he provides the princely sum of $300,000 to found and endow an institution to be called the California School of Mechanical Arts. Thus in one stroke of the pen solving the problem of trades schools, by establishing the institution referred to by private endowment. His other beneficences I need not refer to; they speak for themselves; they need no eulogies at my hands, and never does the mind and the lip feel so weak as when standing in the presence of these facts.

Well done, noble citizen of the commonwealth!

A number of recognized civil, mining and mechanical engineers of this city have organized a "Society of Engineers," the officers of which are Messrs. Allardt, Hanscom, Dickey and Smedberg. Its meetings are held regularly in this building.

The Trustees of the Institute desire to extend to it all courtesy and aid possible, believing that such kindred societies of special character must be valuable auxiliaries in developing the proper conception and appreciation of the mechanic arts.

Among the organizations developed during the year, there is one solely in the interests of the youths of this city; those who, if allowed to grow wild and rank in this climate of rapid vegetation, will most probably become burdens on the public—allies of crime—in other words, will develope into "hoodlums."

It is for the homeless and neglected juveniles; those who, failing the care and attention they should get at home, or failing a home, have up to a certain age, a right to the protection and care of the community, a duty the community cannot shirk, except at cost to itself.

The Boys' and Girls' Aid Society does not propose to deal with criminals. It cannot hope for much success here if the law fails, but it proposes as far as in its power to prevent the youths developing into criminals, and to engender in them self-respect and dependence, with a proper regard for the rights of others. It is entirely unsectarian, and will do a vast amount of good, if it receives the support from the community which I believe it deserves

The various meetings of the Trustees of this society, of which Mr. Geo. C. Hickox, whom you all know, and who is still proud of being a mechanic, is the head, have been held in a room tendered them by the Mechanics' Institute. Let me appeal to you in behalf of the boys and girls of this city. You may be sure that every dollar invested to aid this benevolence will return a handsome interest.

Preparations for the Centennial Exhibition to be held in the city of Philadelphia in 1876, are being pushed ahead as fast as the differences of opinion and local jealousies will permit.

Outside of Pennsylvania but little pecuniary aid has been extended by the people—but little of the stock issued by the board of finance to furnish the funds required has been subscribed for.

A proclamation has been made by the President of the United States, under authority from Congress, announcing the fact that an International Exhibition will be held in Philadelphia during the year 1876, in celebration of the nation's one hundredth anniversary of its birth, and inviting foreign nations to participate. The wisdom of this latter clause may be questioned, but this act having been done, and under sanction of Congress, it seems to me to be too late to retract.

The good faith of the nation is pledged to the faithful performance of the promise made.

That the difficulties now existing will be fully overcome, and the celebration will be held in a degree fully in accord with, and in proportion to the greatness of the nation whose birth it will celebrate, I have no doubt, for I believe that as the time approaches, the enthusiasm and patriotism of the people will be fully aroused, and as we are to have an international instead of a national exhibition, let it be on such a scale as will show the nation's resources and the nations strength by this exhibition of peace and industry, overshadowing similar exhibitions held by the nations of Europe.

The Board of Managers having charge of the forthcoming Industrial Fair, to be held under the auspicies of your society, have had a hurculean work before them, and have been untiring in their energies, and persevering in their efforts to get up a Fair creditable to California, to San Francisco and the Mechanics' Institute.

Although the Board of Managers is a distinct body from the Board of Trustees, and this society is in no way legally responsible for its acts, so that in event of loss the Mechanic's Institute is held harmless as far as possible, I think it proper to report at this time what has been done up to this moment.

The Board found itself without funds, grounds or buildings of any kind, which I think you will admit was not much foundation to start an Industrial Exhibition on, and it was a serious consideration as to how to begin. The only capital the board had was considerable faith, mixed with some earnestness and determination.

During the past two years a large amount of property has been submitted to and examined by committees appointed for the purpose. It was not thought well to construct another temporary building of wood, and hopes were entertained that some plan might be hit upon whereby a permanent site might be secured, and hence a permanent building. In this, in spite of the best efforts of your Board and many friends of the society, there was an utter failure, and it was only late in 1873 that an arrangement was made between Mr. Andrew McCreery and the gentlemen comprising the Board of Managers, for the occupancy of two one hundred vara lots owned by him on the eastern side of Eighth street, between Mission and Market, for a term of six years, the conditions being that the Managers should pay all assessments on said property for that term, with a further bonus of $7,500 if it was determined to occupy the land the sixth year.

As early as practicable in the spring letters were addressed to the different city railroad companies, asking from each of them a donation to aid the enterprise, on the grounds that no corporations would be so favorably affected by the holding of a series of fairs as these companies, who would transport the visitors to the Fair. I would remind you that there are six different lines of horse cars approaching within two blocks of the Fair grounds, and that it was not unreasonable to look for assistance to the amount of $20,000 in the aggregate from them. It was a considerable disappointment and surprise to us that our application was denied.

The failure in this direction did not raise the enthusiasm of the managers, or clear up the clouds of financial embarrassment. Meanwhile time was passing—the Board had determined by

resolution to open the Fair on the eighteenth of August, 1874, at 11 A. M. The next move was to make personal application to the corporations and citizens at large for loans, without interest, to be repaid from the net receipts of the fairs, a mode that had been tried before to a limited extent with success, involving however considerable labor on the part of the members of the Board. In this effort we had so many assurances of good will and kindly feeling, that the managers went forward with the work, obtained plans and specifications from Mr. David Farquharson for a building much larger than originally intended, and advertised for bids to construct the same.

Meantime Mr. J. H. Gilmore had been appointed special agent, and reported success in his department, the application for space being much beyond expectation, and the members of the Board of Managers had not been idle in obtaining subscriptions to the loan. By the first of May the total subscriptions amounted to $39,000, and at a subsequent meeting certain members of the Board pledged themselves to secure further loans to the amount of $24,000, making in the aggregate $63,000. This sum must be increased to $75,000, in order to enable the managers to meet their contract before the first of August.

On the seventh of May a contract was entered into with Mr. James Drury, for the construction of the building at a cost of $69,600—the fitting up will probably cost $25,000 more, or say $95,000 in all. The building will be a strong, substantial structure erected on brick foundations, having a main nave 440 feet long, 100 feet span, and 81 feet high, with a balcony 20 feet above the floor, projecting into the nave 16 feet and surrounding the same.

Entirely around the main nave there will be a two story building 50 feet wide, each story 20 feet high. This building will have a frontage on Eighth street of 541 feet, on Market street 200 feet, on the rear of the lot 541 feet, and on Mission street 200 feet, or a total frontage of 1,481 feet, two stories high.

The main entrance will be on Mission street, protected from the wind, on the sunny side of the street, and in closest contiguity to the various lines of street cars.

The Art Galleries will be on Eighth street, the light to which will be admitted from the roof on the north side, through heavy, corrugated glass, protected from the rays of the sun.

The machinery department will be on the easterly side, entrances being from Stevenson and Jessie streets.

The total amount of floor room will be 187,000 feet. The following table shows the floor room of different Fair buildings constructed under the auspicies of this society, and by which a comparison can be drawn.

Year.	1857	1858	1864	1865	1868	1869	1871	1874
Area feet.	20,000	25,000	55,000	61,000	75,000	87,000	120,000	187,000

One-third of this space is actually used for exhibiting purposes, the balance, two-thirds, being consumed in fountains, galleries, space for visitors, etc. Each exhibitor requires a total space of 110 feet; therefore in the above building there will be room for 1,700 exhibitors.

As at the last Fair there were 1,020 exhibitors, doubtless the building now in course of construction will be large enough without alteration for three years.

It is believed that there will be a very large increase of exhibitors and visitors; the attendance of the latter has always been large—by actual count at the last Fair 21,756 persons passed into the building in one day—an important item for the street car lines, the importance of which the railroad companies of Chicago, Philadelphia and other cities were fully alive to. I doubt not that the street railroad companies of San Francisco will, on due reflection, come forward liberally to the support of the enterprise—an enterprise involving an immense amount of care and gratuitous labor on the part of the managers, but of immense benefit to the city of San Francisco, and the industrial interests of this state.

In respect to the condition of the Institute during the past year the Committee on Library, Rooms and Building report that the building is in good repair, and that the rentable portions are occupied by good tenants.

The committee draws the attention of the Board to the lack of shelf room in the library, and advise that steps be taken to provide better facilities for the library and reading room and chess room, as well as the other departments of the Institute. The total outlay incurred by the committee during the year amounts to $1,582.07, of which $625.13 was for a new carpet and $626.28 for furniture, carpets and fixtures for the lower hall.

The Committee on Books and Donations report having expended $2,523 for new books, and deplore that they are so restricted in their expenditures, which are entirely inadequate to

the requirements of the society, as there never was a time when the supply of valuable technical works was so great, and the demand is at all times fully up to the supply.

During the year 1,261 volumes have been added to the library by purchase, classified as follows:

Science and Art	284
Fiction	605
Essay and General Literature	115
Biography	53
History	69
Sundries	15
Poetry and Drama	43
Travels	36
Law and Political Economy	13
Wit and Humor	6
Encyclopedia and Dictionary	18
Bound Periodicals	4

During the year 83,321 books have been withdrawn from the library. This number will give you some idea of the activity of our general library.

The Committee on Lectures and Classes report that the course of lectures held during the past winter were not as popular as heretofore, and lacked about $20 of paying the expenses of the same.

The Committee of Ways, Means and Accounts report the Treasurer's reports as correct.

The total number of volumes now in your library is 19,807.

The number of members who have joined the Institute during the year is 519, and your membership roll contains names in good standing to the number of 1,456.

The financial statement of the society for the year ending May 31, 1874, is as follows:

INSTITUTE FUND—RECEIPTS.

Rents	$7,003.75	
Dues, Membership, etc	6,875.30	
		$13,879.05
Bal. due Treasurer this date		1,446.35
		$15,325.40

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DISBURSEMENTS.

Insurance	$ 690.00	
Interest	537.42	
Books	2,859.98	
Periodicals and newspapers	1,039.72	
Book binding	807.30	
Advertising	85.00	
Furniture and supplies	407.94	
Sundries and petty cash	626.06	
Water	216.00	
Gas	1,002.23	
Improvements and repairs	269.22	
Printing	185.00	
Sinking fund	1,387.87	
Salaries	4,140.00	
		$14,253.84
Due Treasurer May 31, 1873		1,071.56
		$15,325.40

SINKING FUND—RECEIPTS.

Balance on hand May 31, 1873	$1,657.44
Ten per cent. of receipts for this year	1,387.87
Interest on balances	90.60
	$3,135.91

DISBURSEMENTS.

City and County taxes, 1873–74	$1,440.00
Balance on hand	$1,695.91

LIFE MEMBERSHIP, (SPECIAL).

Thirty-six life members from Jan. 9, 1872	$1,800	
Amount transferred to general fund	850	
Balance on hand		$ 950

The assets and liabilities of this society are as follows:

ASSETS.

Lot and building on Post street	$120,000.00
Library	25,000.00
Fixtures and furniture	6,000.00
Cash on hand—sinking fund	1,695.91
Special Fund—life membership	1,800.00
Cash in hands Librarian	114.40
Dues unpaid and collectable	400.00
May rent E. Neuman's store	125.00
	$155,135.31

LIABILITIES.

Balance due on mortgage	$5,000.00
Due Treasurer	1,446.35
Due life membership fund	850.00
Bills not paid, including salaries and expenses for June	2,202.38
Total liabilities,	9,498.73
Net assets	$145,636.58

The average monthly revenue for the past year was as follows:

From rent	$583.63
" dues	572.94
	1,156.57

The Mechanics' Institute has a glorious future before it, and a grand field of usefulness. Let it go forward, having faith in its destiny, and hampered by no narrowness of mind or selfishness, it will be a blessing to the mechanic and an aid to industry. While doing its work, let it help everything that helps mankind, and thus while this society honors its members, each member in this spirit will do honor to the Mechanics' Institute.

In conclusion I would add, for the kindly courtesy and coöperation of the members and officers during the year just ended, I beg to return my sincere thanks.

A. S. HALLIDIE, PRESIDENT.